SERVICE MANUAL

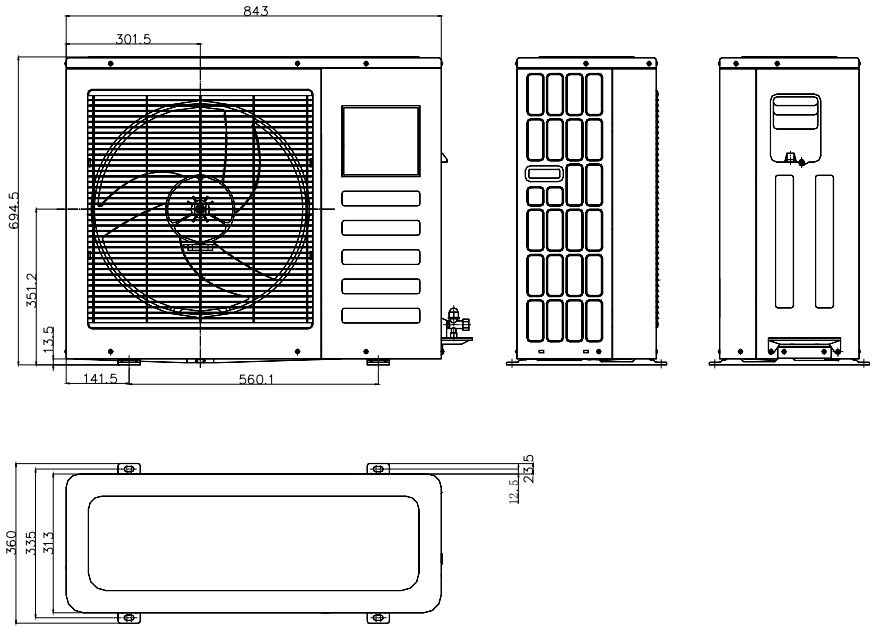
CONDENSING UNITS

ASE-18A, ASE-24A
ASE-36A, ASE-48A, ASE-60A

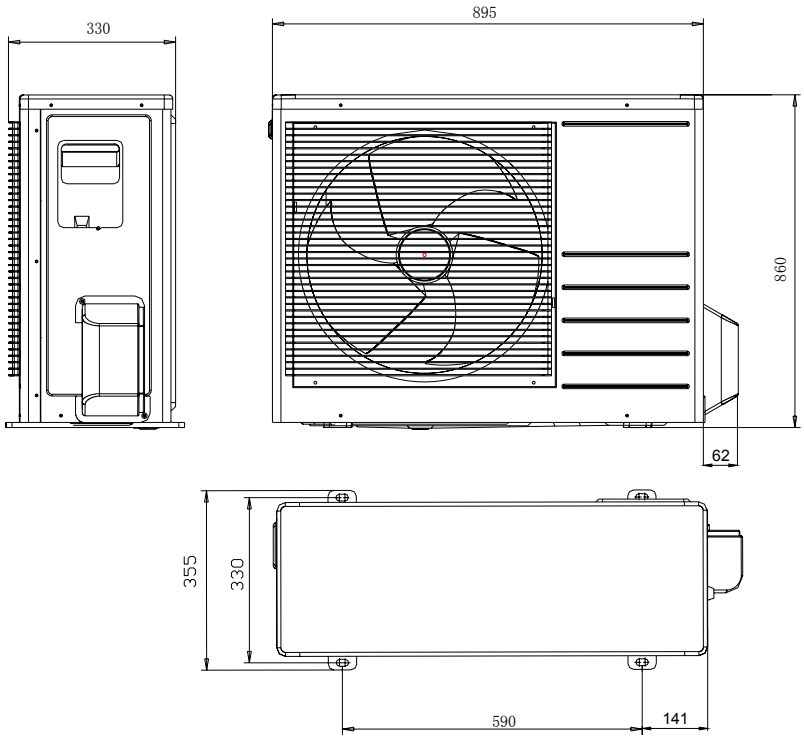
sinclair
AIR CONDITIONING

1. Dimensions

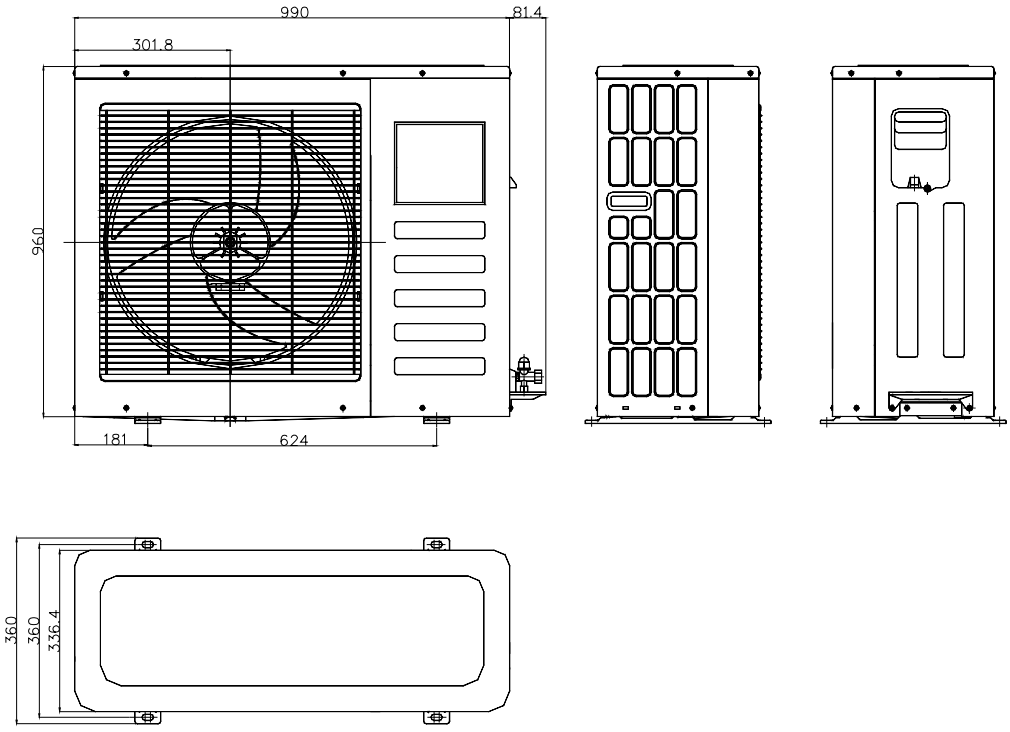
ASE-18A



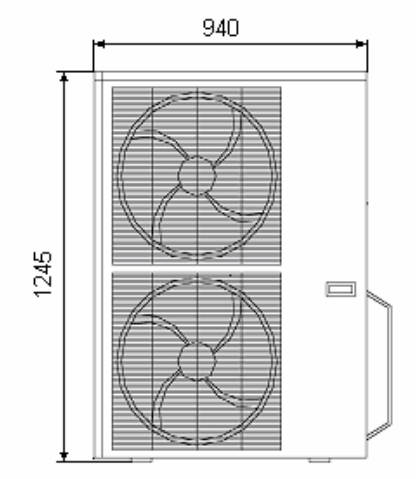
ASE-24A

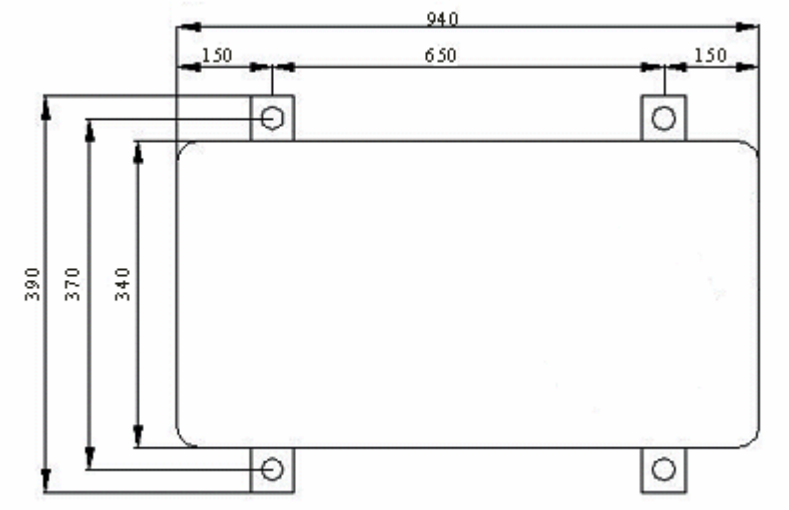


ASE-36A



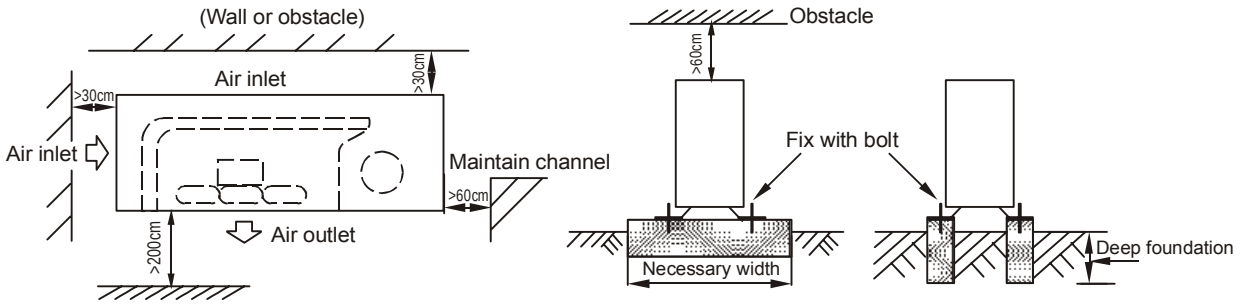
ASE-48A ASE-60A

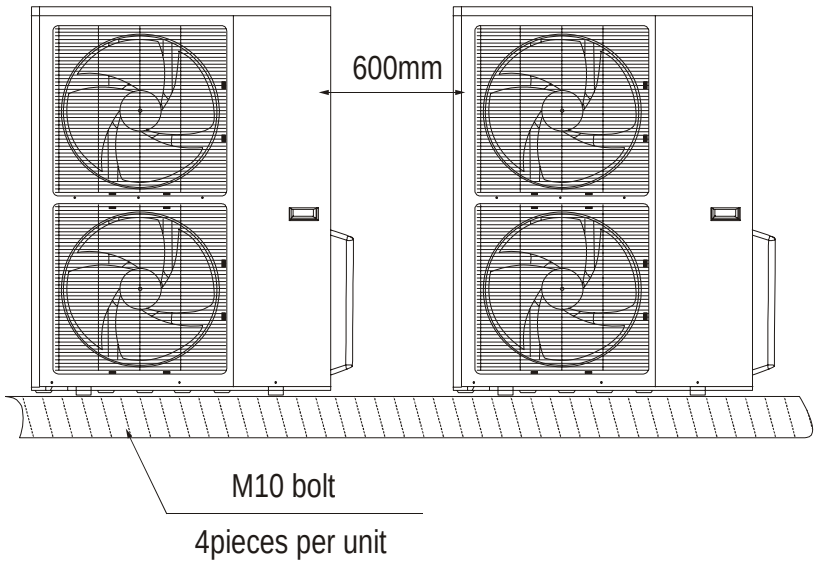




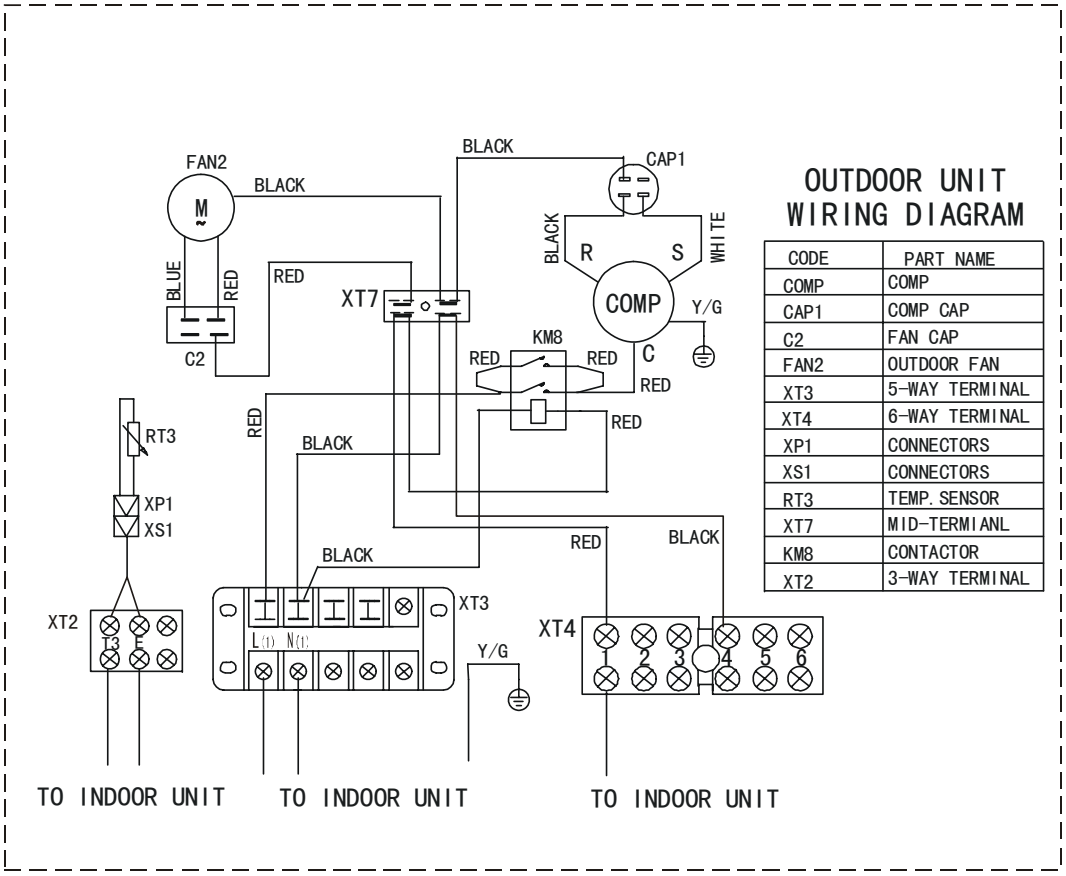
2. Service Space

Capacity≤60000Btu





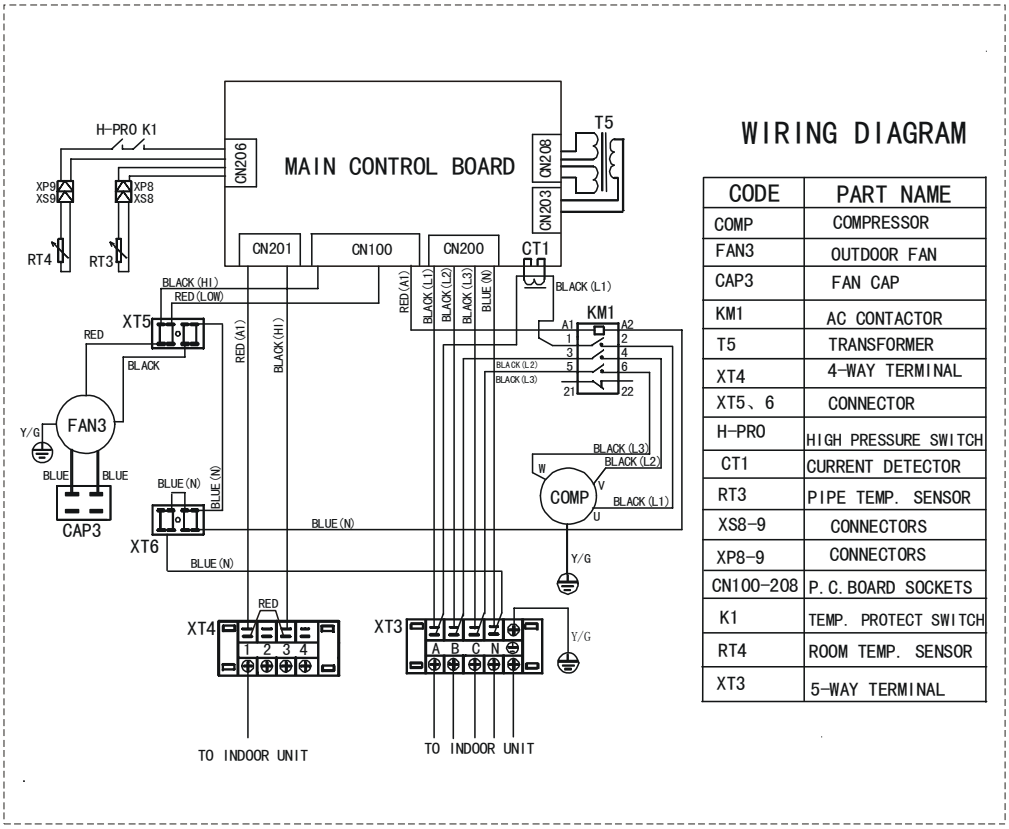
ASE-24A



OUTDOOR UNIT
WIRING DIAGRAM

CODE	PART NAME
COMP	COMP
CAP1	COMP CAP
C2	FAN CAP
FAN2	OUTDOOR FAN
XT3	5-WAY TERMINAL
XT4	6-WAY TERMINAL
XP1	CONNECTORS
XS1	CONNECTORS
RT3	TEMP. SENSOR
XT7	MID-TERMIANL
KM8	CONTACTOR
XT2	3-WAY TERMINAL

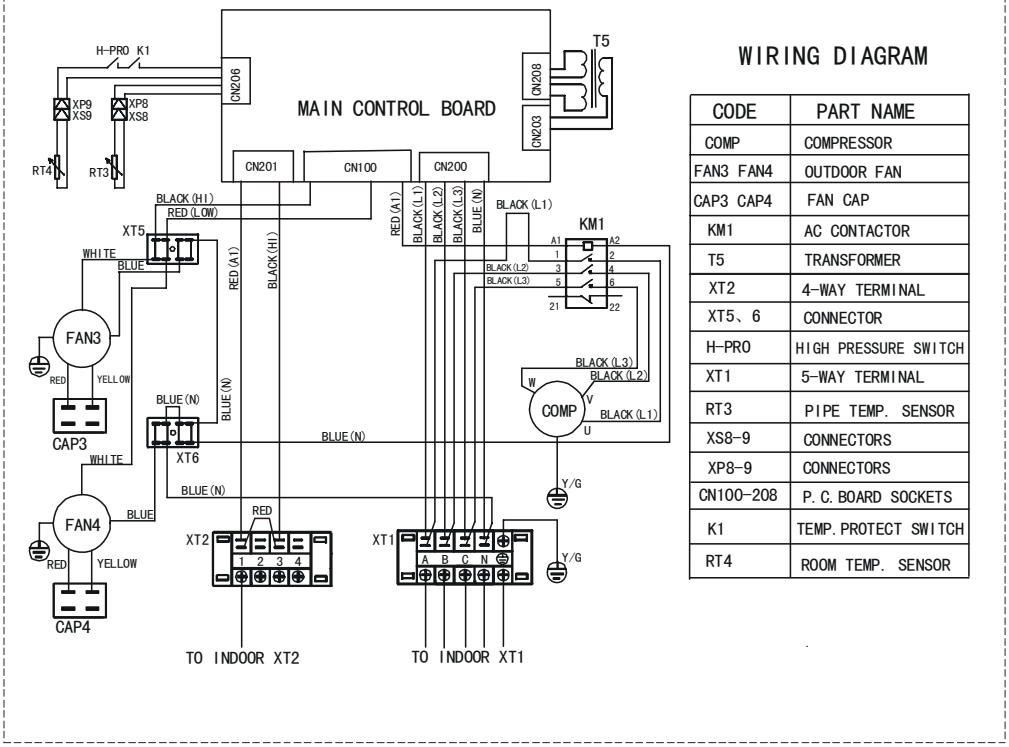
ASE-36A



WIRING DIAGRAM

CODE	PART NAME
COMP	COMPRESSOR
FAN3	OUTDOOR FAN
CAP3	FAN CAP
KM1	AC CONTACTOR
T5	TRANSFORMER
XT4	4-WAY TERMINAL
XT5、6	CONNECTOR
H-PRO	HIGH PRESSURE SWITCH
CT1	CURRENT DETECTOR
RT3	PIPE TEMP. SENSOR
XS8-9	CONNECTORS
XP8-9	CONNECTORS
CN100-208	P.C.BOARD SOCKETS
K1	TEMP. PROTECT SWITCH
RT4	ROOM TEMP. SENSOR
XT3	5-WAY TERMINAL

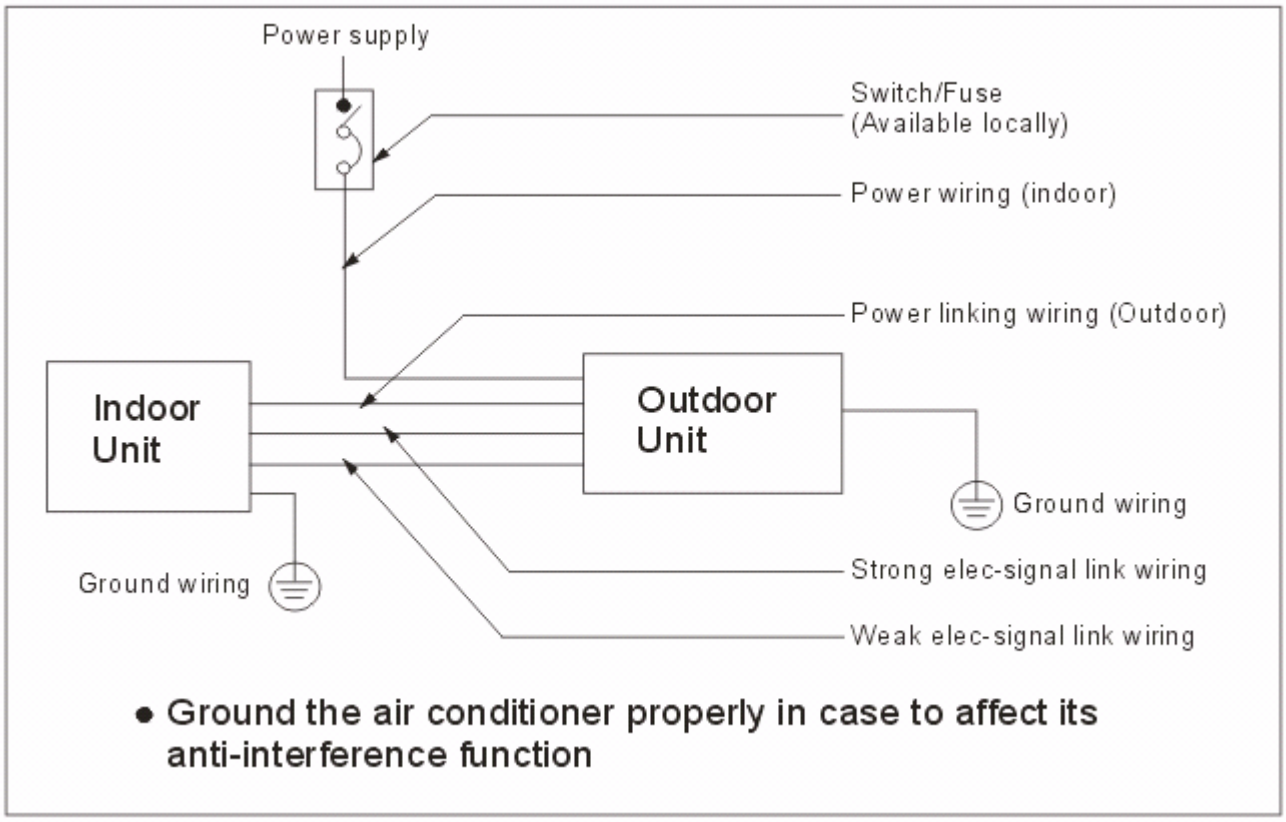
ASE-48A ASE-60A



WIRING DIAGRAM

CODE	PART NAME
COMP	COMPRESSOR
FAN3 FAN4	OUTDOOR FAN
CAP3 CAP4	FAN CAP
KM1	AC CONTACTOR
T5	TRANSFORMER
XT2	4-WAY TERMINAL
XT5、6	CONNECTOR
H-PRO	HIGH PRESSURE SWITCH
XT1	5-WAY TERMINAL
RT3	PIPE TEMP. SENSOR
XS8-9	CONNECTORS
XP8-9	CONNECTORS
CN100-208	P.C.BOARD SOCKETS
K1	TEMP.PROTECT SWITCH
RT4	ROOM TEMP. SENSOR

4. Field Wiring



5. Electric Characteristics

Model	Units				Compressor		OFM	
	Hz	Voltage	Min.	Max.	MSC	RLA	KW	FLA
ASE-18A	50	220~240	198	264	36.8	8.75	53	0.61
ASE-24A	50	220~240	198	264	61	11.4	53	0.66
ASE-36A	50	380	342	418	61	6.58	250	1.38
ASE-48A	50	380	342	418	66	8.22	65	0.7
ASE-60A	50	380	342	418	67	9.77	65	0.7

Symbols:

MSC: Max. Starting Current

RLA: Rated Locked Current

OFM: Outdoor Fan Motor

FLA: Full Load Amps.

KW: Rate Motor Output

Notes:

1. RLA is based on the following conditions:

Indoor temp. 27℃ DB/19℃ WB

Outdoor temp. 35℃ DB

2. MSC means the Max. current during the starting of compressor;

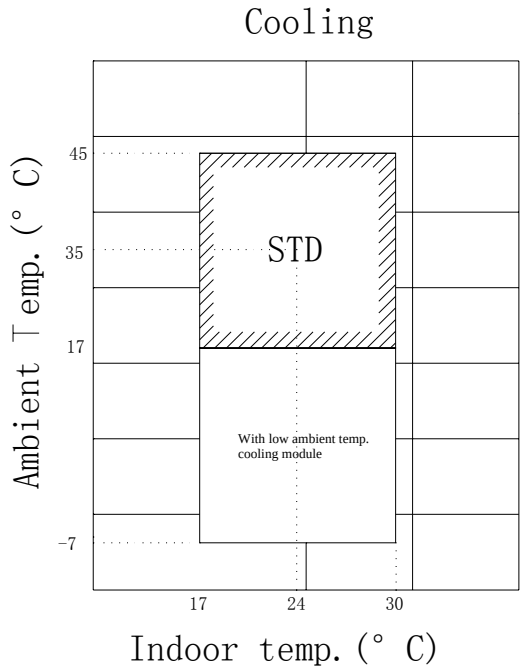
3. Voltage range

Units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed range limits;

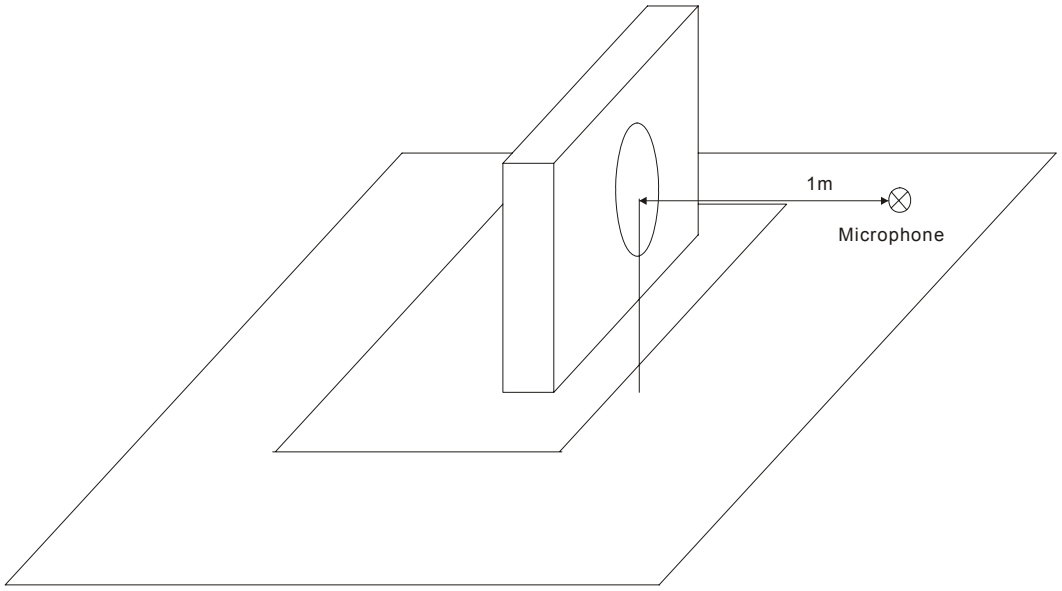
4. Maximum allowable voltage variation between phase is 2%;

6. Operation Limits

Ensure the operating temperature is in allowable range.



7. Sound levels



Model	Noise level(dB(A))
ASE-18A	48
ASE-24A	55
ASE-36A	57
ASE-48A	58
ASE-60A	

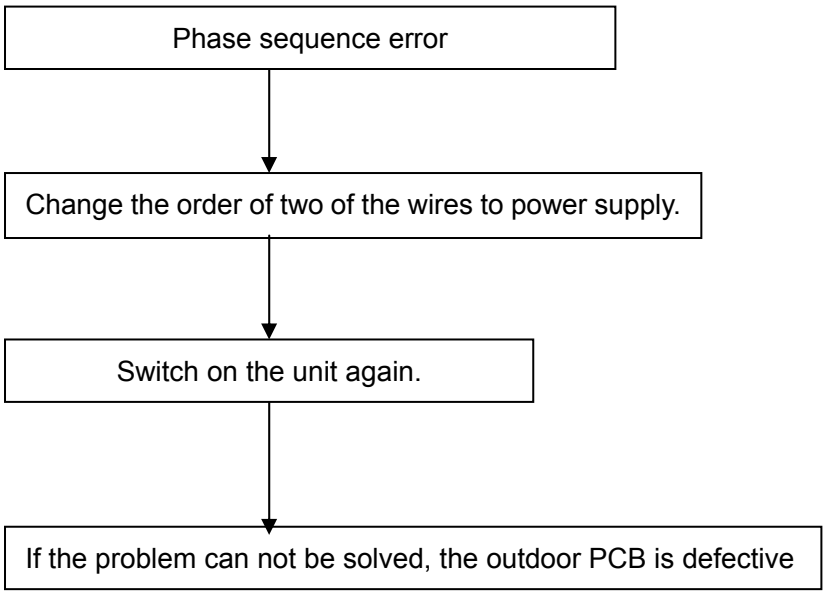
9. Troubleshooting

LEDs' for the indication of outdoor trouble

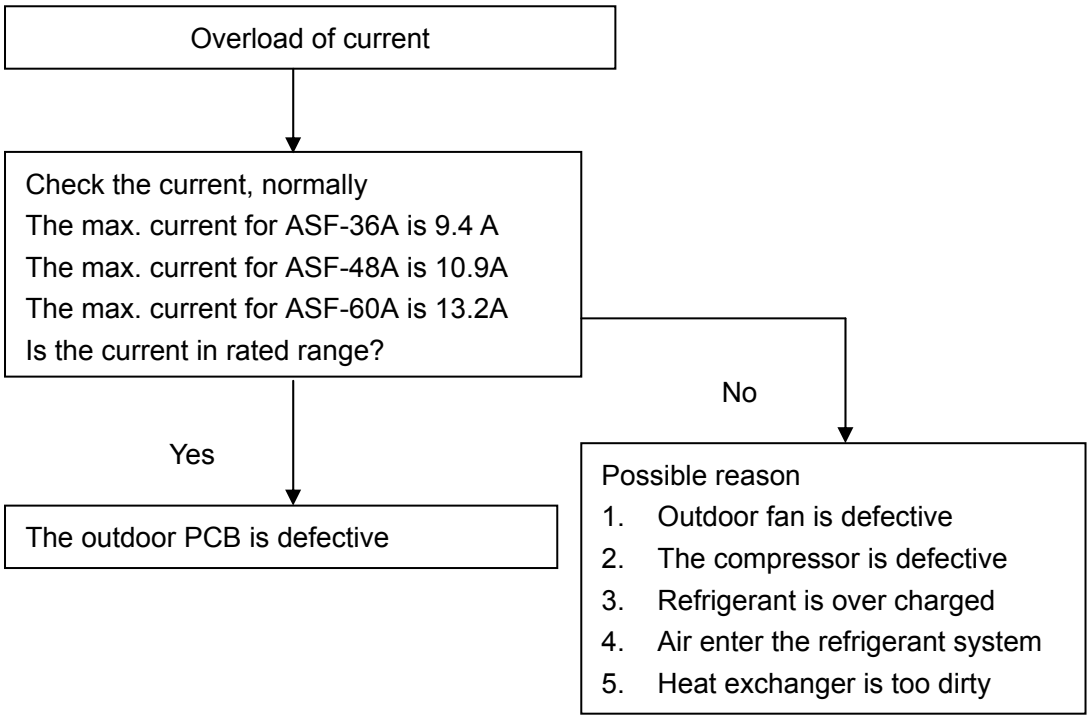
ASF-36A, ASF-48A, ASF-60A， 380-415V, 3 phase

Type	Contents	LED1	LED2	LED3
Protection	Phase sequence	Flash	Off	Off
Protection	Overload of current	Off	Off	Flash
Protection	Lack of phase	Flash	Off	Off
Protection	Protection of pressure	Flash	Flash	Off
Protection	Open-circuit and short-circuit trouble of T3	Off	Flash	Flash
Protection	Open-circuit and short-circuit trouble of T4	Off	Flash	Off
Protection	High temperature protection of condenser	Flash	Flash	Flash

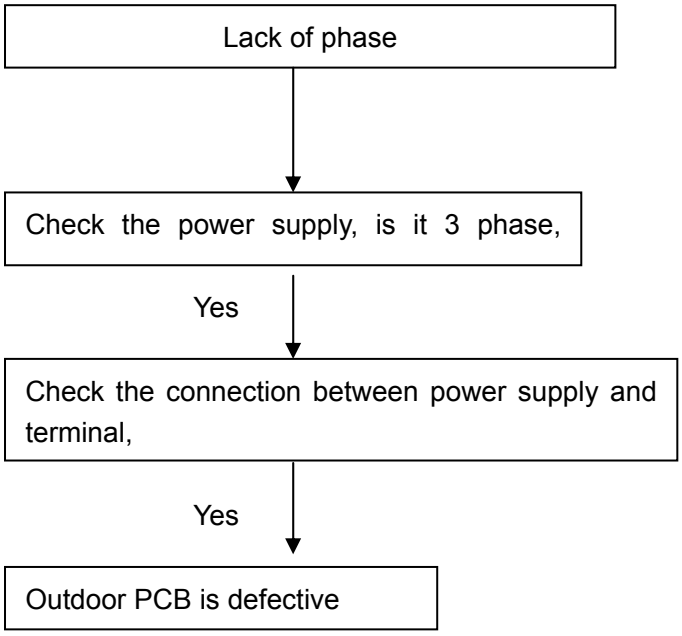
9.2.1 Phase sequence error:


Phase sequence error
Change the order of two of the wires to power supply.
Switch on the unit again.
If the problem can not be solved, the outdoor PCB is defective

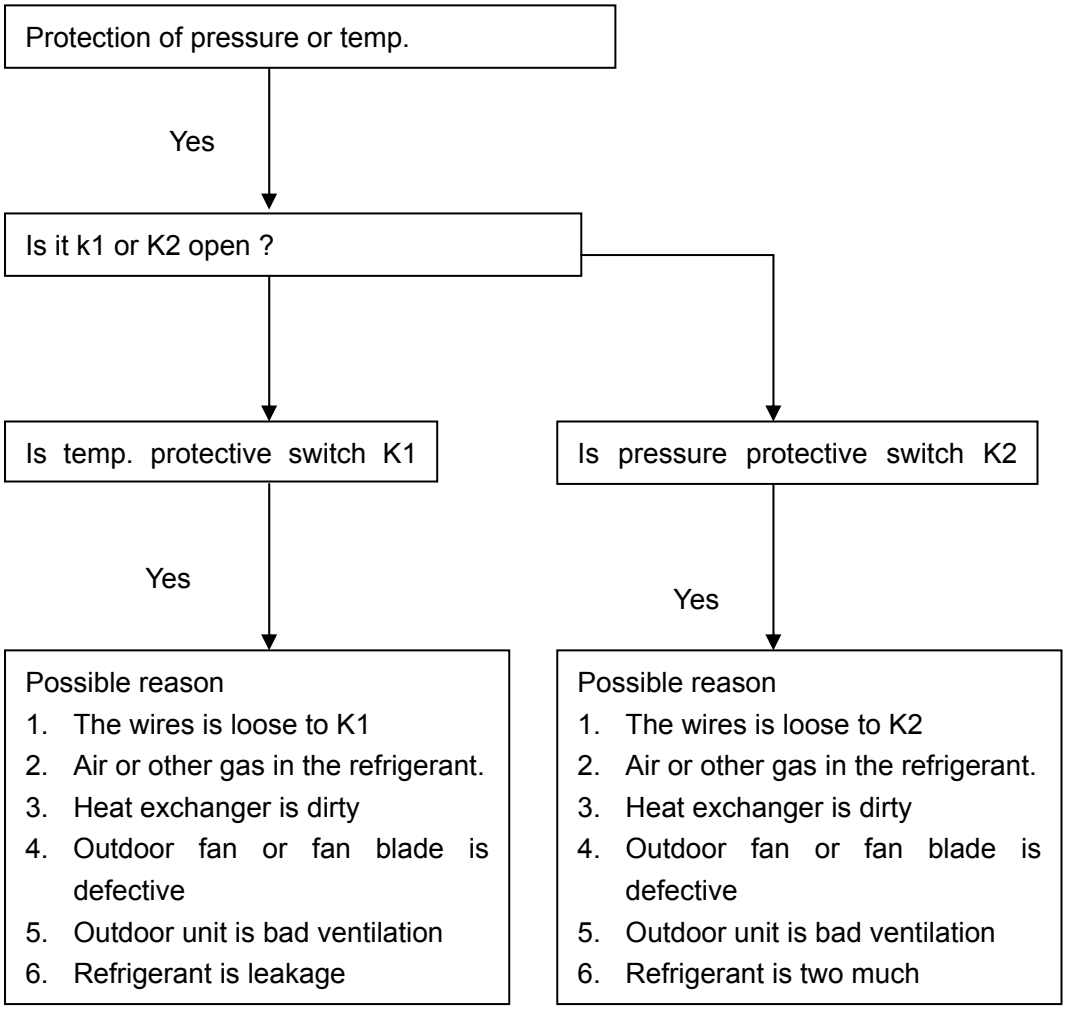
9.2.2 Overload of current


Overload of current
Check the current, normally
The max. current for ASF-36A is 9.4 A
The max. current for ASF-48A is 10.9A
The max. current for ASF-60A is 13.2A
Is the current in rated range?
No
Yes
The outdoor PCB is defective
Possible reason
1. Outdoor fan is defective
2. The compressor is defective
3. Refrigerant is over charged
4. Air enter the refrigerant system
5. Heat exchanger is too dirty

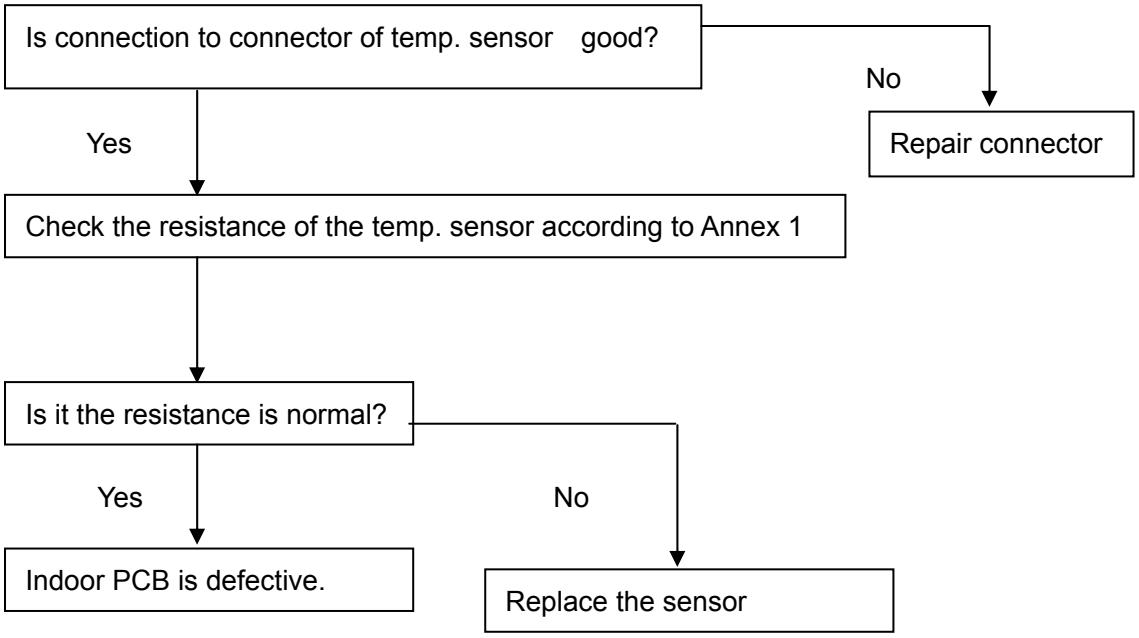
9.2.3 Lack of phase


Lack of phase
Check the power supply, is it 3 phase,
Yes
Check the connection between power supply and terminal,
Yes
Outdoor PCB is defective

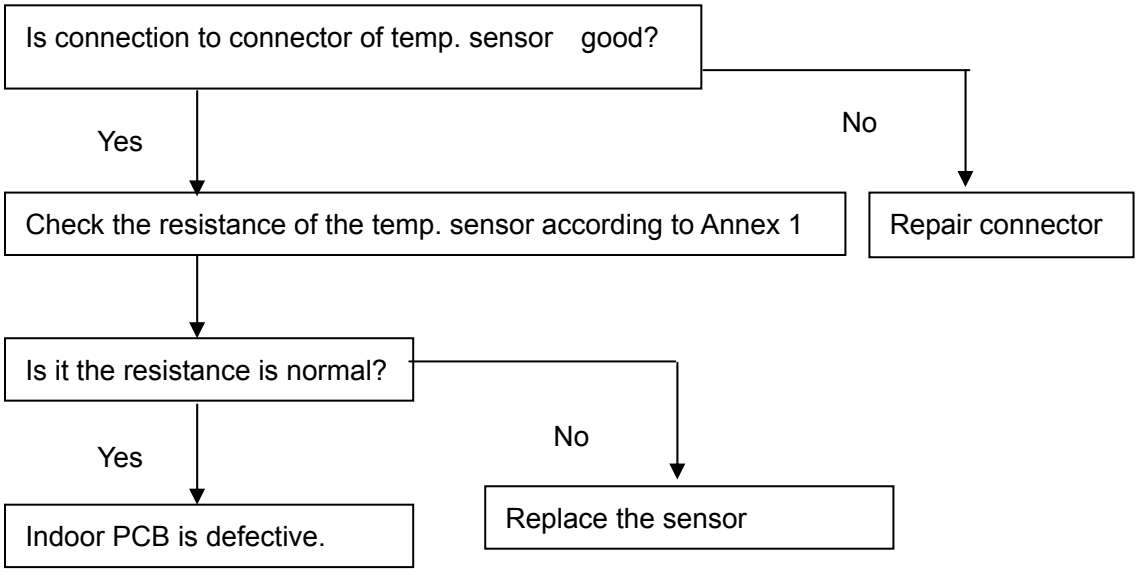
9.2.4 Protection of pressure or temp.


Protection of pressure or temp.
Yes
Is it k1 or K2 open ?
Is temp. protective switch K1
Is pressure protective switch K2
Yes
Yes
Possible reason
1. The wires is loose to K1
2. Air or other gas in the refrigerant.
3. Heat exchanger is dirty
4. Outdoor fan or fan blade is defective
5. Outdoor unit is bad ventilation
6. Refrigerant is leakage
Possible reason
1. The wires is loose to K2
2. Air or other gas in the refrigerant.
3. Heat exchanger is dirty
4. Outdoor fan or fan blade is defective
5. Outdoor unit is bad ventilation
6. Refrigerant is two much

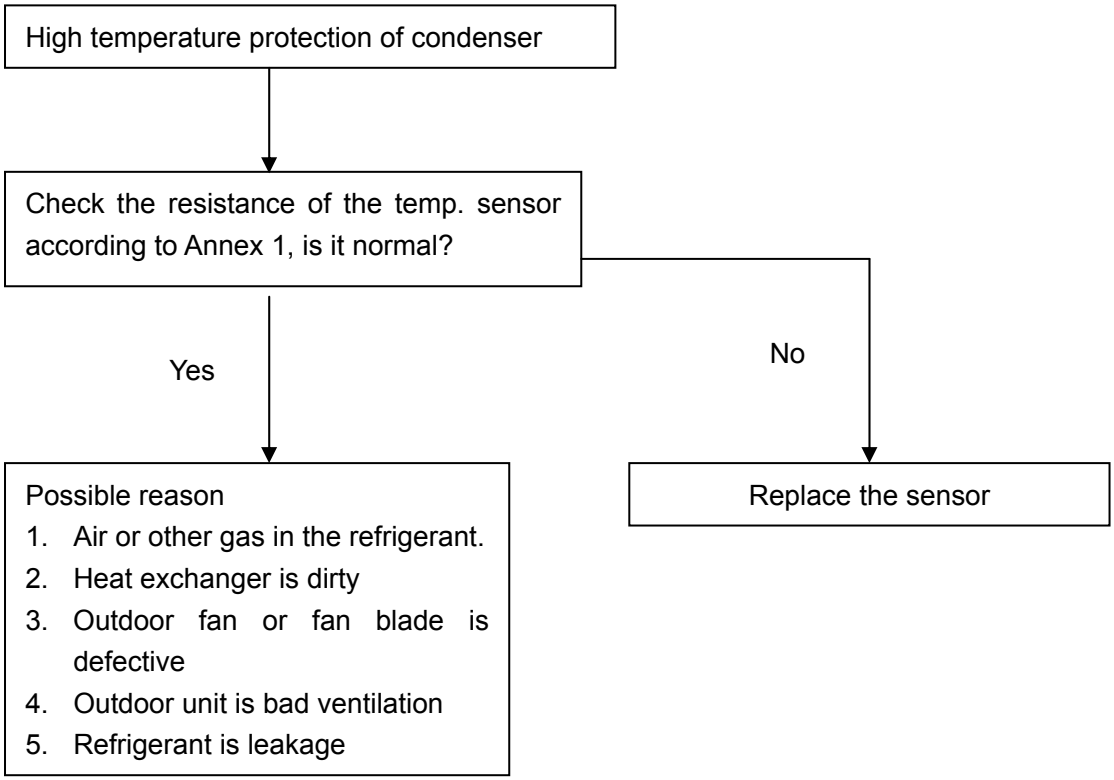
9.2.5 Open-circuit and short-circuit trouble of T3



9.2.6 Open-circuit and short-circuit trouble of T4



9.2.7 High temperature protection of condenser


High temperature protection of condenser
Check the resistance of the temp. sensor according to Annex 1, is it normal?
Yes
No
Possible reason
1. Air or other gas in the refrigerant.
2. Heat exchanger is dirty
3. Outdoor fan or fan blade is defective
4. Outdoor unit is bad ventilation
5. Refrigerant is leakage
Replace the sensor

9.3 Troubles and Solutions

If any the following abnormal conditions occur, turn off the power supply immediately. Please contact our dealer.		
TROUBLES	Indicator lamps flash rapidly, after your disconnecting and connecting the unit, the situation is the same.	
	Fuse or circuit breaker work frequently.	
	Foreign matter or water has fallen into the unit.	
	Remote controller is disabled or the switch is out of hand.	
	Any other unusual conditioner is observed.	
If any of the following conditions occur, check your unit and resolve corresponding problems referring to given remediation. If the trouble can't be settled contact our dealer.		
Trouble	Cause	Solutions
Unit does not start	Power failure.	Wait for the comeback of power
	Power switch is open.	Switch on the power
	Fuse of power switch may have blown.	Replace the fuse
	Batteries of remote controller are exhausted.	Replace the batteries
	The time is not start-up time you have set.	Wait or cancel the time set.
Air flowing normally with low cooling(heating) effect	Temperature is not set correctly.	Set the temperature properly.
	Door or window is open.	Close door and window.
	Air filter is blocked with dust or dirtiness.	Clean the air filter.
	Inlet/outlet of indoor/outdoor units are blocked.	Clear all blockages.
	Inlet/outlet of indoor/outdoor units are blocked.	Clear the blockage, then restart your operation.
	Be in 3 minutes protection of compressor	Wait

◆ NOTE: Do not replace electric wire or repair the air conditioner by yourself to avoid possible danger.

9.4 Troubles and solutions concerning the remote controller

Please make the following check before asking for repair or maintenance.

Trouble	Cause	Solutions
CAN NOT CHANGE THE FAN SPEED SETTING	Check if the mode display on the LCD is AUTO	The Indoor Unit will select fan speed automatically when AUTO mode is selected.
	Check if the mode display on the LCD is DRY	The Indoor Unit will select fan speed automatically when the unit is on DRY mode.

The transmission symbol does not flash		
Symptom	Checking items	Cause
Press ON/OFF button, the remote controlling signals can not be transmitted	Check if the remote controller has run out of power	When the battery was out, transmission signals can not be sent

Temperature display disappear		
Symptom	Checking items	Cause
Temperature Display does not light.	Check if the mode display on the LCD is FAN ONLY	You can not set the temperature when the unit is on FAN ONLY mode.

The Display Goes Off		
Symptom	Checking items	Cause
The indication on the display disappears after a lapse of time.	Check whether the timer operation has come to an end when the OFF TIMER is indicated on the display.	The air conditioner operation stops since the set time elapsed.
The ON TIMER indicators go off after a lapse of certain time.	Check whether the timer operation is started when the ON TIMER is indicated on the display.	When the time set to start the air conditioner is reached, the air conditioner will automatically start and the appropriate indicator will go off.

The Signal Receiving Tone does Not Sound		
Symptom	Checking items	Cause
No receiving tone sounds from the indoor unit even when the ON/OFF button is pushed.	Check whether the signal transmitter of the remote controller is properly directed to the receiver of the indoor unit when the ON/OFF button is pushed.	Direct the signal transmitter of the remote controller to the receiver of the indoor unit, and then repeatly push the ON/OFF button twice.
Buttons on the remote controller don't work.		Press Reset button.

Installation

1. Refrigerant pipe installation

1.1. Measure the necessary length of the connecting pipe, and make it by the following way.

a. Connect the indoor unit at first, then the outdoor unit.

Bend the tubing in proper way. Do not harm them.

CAUTIONS:

- Daub the surfaces of the flare pipe and the joint nuts with frozen oil, and wrench it for 3~4 rounds
- With hands before fasten the flare nuts.

Be sure to use two wrenches simultaneously when you connect or disconnect the pipes.

Tubing size	Torque
6.35	1420~1720N.cm(144~176kgf.cm)
9.52	3270~3990N.cm(333~407kgf.cm)
12.7	4950~6030N.cm(504~616kgf.cm)
16	6180~7540N.cm(630~770kgf.cm)
19	9720~11860N.cm(990~12106kgf.cm)

b. The stop value of the outdoor unit should be closed absolutely (as original state). Every time you connect it, first loosen the nuts at the part of stop value, then connect the flare pipe immediately (in 5 minutes). If the nuts have been loosened for a long time, dusts and other impurities may enter the pipe system and may cause malfunction later. So please expel the air out of the pipe with refrigerant before connection.

c. Expel the air after connecting the refrigerant pipe with the indoor unit and the outdoor unit. Then fasten the nuts at the repair-points.

1.2. Locate The Pipe

a. Drill a hole in the wall (suitable just for the size of the wall conduit), then set on the fittings such as the wall conduit and its cover.

b. Bind the connecting pipe and the cables together tightly with binding tapes. Do not let air in, which will cause water leakage by condensation.

c. Pass the bound connecting pipe through the wall conduit from outside. Be careful of the pipe allocation to do no damage to the tubing.

1.3. Connect the pipes.

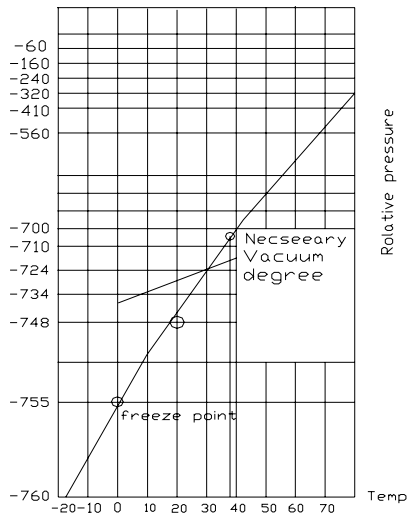
1.4. Then, open the stem of stop values of the outdoor unit to make the refrigerant pipe connecting the indoor unit with the outdoor unit in fluent flow.

1.5. Be sure of no leakage by checking it with leak detector or soap water.

1.6. Cover the joint of the connecting pipe to the indoor unit with the soundproof / insulating sheath (fittings), and bind it well with the tapes to prevent leakage.

2. Vacuum dry and leakage checking

2.1. Vacuum Dry: use vacuum pump to change the moisture (liquid) into steam (gas) in the pipe and discharge it out of the pipe to make the pipe dry. Under one atmospheric pressure, the boiling point of water(steam temperature) is 100℃. Use vacuum pump to make the pressure in the pipe near vacuum state, the boiling point of water falls relatively. When it falls under outdoor temperature, the moisture in the pipe will be vaporized.

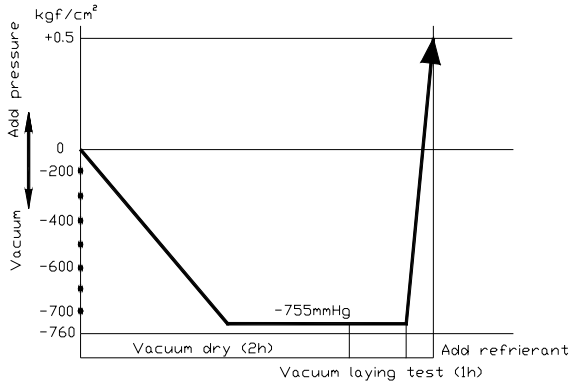


2.2. Vacuum dry procedure

There are two methods of vacuum dry due to different construction environment: common vacuum dry, special vacuum dry.

①. Common vacuum dry procedure

- Vacuum dry (for the first time)---connect the all-purpose detector to the inlet of liquid pipe and gas pipe, and run the vacuum pump more than two hours (the vacuum pump should be below -755mmHg)
- If the pump can't achieve below -755mmHg after pumping 2 hours, moisture or leakage point will still exist in the pipe. At this time, it should be pumped 1 hour more.
- If the pump can't achieve -755mmHg after pumping 3 hours, please check if there are some leakage points.
- Vacuum placement test: place 1 hour when it achieves -755mmHg, pass if the vacuum watch shows no rising. If it rises, it shows there's moisture or leakage point.
- Vacuuming from liquid pipe and gas pipe at the same time.
- Sketch map of common vacuum dry procedure.



② Special vacuum dry procedure

- This vacuum dry method is used in the following conditions:
- ◆ There's moisture when flushing the refrigerant pipe.
- ◆ Rainwater may enter into the pipe.
- Vacuum dry for the first time ····· 2h pumping

③. Vacuum destroy for the second time ····· Fill nitrogen to 0.5Kgf/cm2

Because nitrogen is for drying gas, it has vacuum drying effect during vacuum destroy. But if the

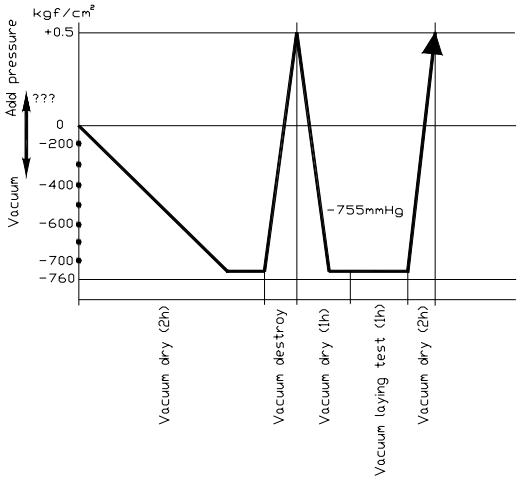
moisture is too much, this method can't dry thoroughly. So, please pay more attention to prevent water entering and forming condensation water.

④. Vacuum dry for the second time·····1h pumping

Determinant: Pass if achieving below -755mmHg. If -755mmHg can't be achieved in 2h, repeat procedure ③ and ④.

⑤. Vacuum placing test ····· 1h

⑥. Sketch map of special vacuum dry procedure



3. Additional charge

3.1. When the length of the one-way pipe is less than 5m, additional refrigerant charge after vacuuming is unnecessary.

3.2. When the length of one-way pipe is over 5m, the additional charge quantity is as follows (unit in gram):

Calculation method

Refrigerant	Liquid diameter（mm）	Unit amount (g/m)	Formula
R410A	Φ6.35	30	(L-5)×22
	Φ9.53	65	(L-5)×60
	Φ12.7	90	(L-5)×110

Remark：1、The additional refrigerant charge is simply related with the liquid pipe diameter.

2、In the up formula, "L" means total length of liquid pipe(unit: m).

4. Water drainage

4.1. Gradient and Supporting

4.1.1 Keep the drainpipe sloping downwards at a gradient of at least 1/100. Keep the drainpipe as short as possible and eliminate the air bubble.

4.1.2 The horizontal drainpipe should be short. When the pipe is too long, a prop stand must be installed to keep the gradient of 1/100 and prevent bending. Refer to the following table for the specification of the prop stand.

	Diameter	Distance between the prop stands
Hard PVC pipe	25~40mm	1.5~2m

4.1.3. Precautions

① The diameter of drainpipe should meet the drainage requirement at least.

② The drainpipe should be heat-insulated to prevent atomization.

③ Drainpipe should be installed before installing indoor unit. After powering on, there is some water in water-receiver plate. Please check if the drain pump can operate correctly.

④ All connection should be firm.

⑤ Wipe color on PVC pipe to note connection.

⑥ Climbing, horizontal and bending conditions are prohibited.

⑦The dimension of drainpipe can't less than the connecting dimension of indoor drainpipe.

⑧ Heat-insulation should be done well to prevent condensation.

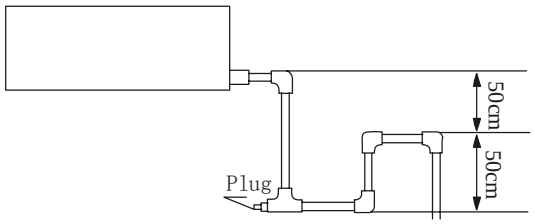
⑨Indoor units with different drainage type can't share one convergent drainpipe.

4.2 Drainpipe Trap

4.2.1. If the pressure at the connection of the drainpipe is negative, it needs to design drainpipe trap.

4.2.2. Every indoor unit needs one drainpipe trap.

4.2.3. A plug should be designed to do cleaning.



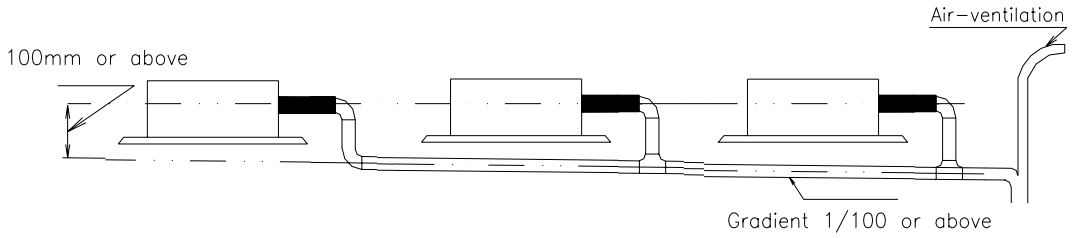
4.3 Upwards drainage(drain pump)

4.3.1. To ensure the gradient 1/100, the drainpipe can be lifted it you use water lpump. After upwards, place downwards or it will cause malfunction to drain pump.

4.4 Convergent drainage

4.4.1. The number of indoor units should be as small as possible to prevent the traverse main pipe overlong.

4.4.2. Indoor unit with drain pump and indoor unit without drain pump should be in different drainage system.



4.4.3. Selecting the diameter

Number of connecting indoor units→Calculate drainage volume→Select the diameter

Calculate allowed volume =Total cooling capacity of indoor units(HP)×2 (l/ hr)

	Allowed volume(lean 1/100) (l/ hr)	I.D. (mm)	Thick
Hard	∽≤14	¢25	3.0
Hard	14＜∽≤88	¢30	3.5
Hard	88＜∽≤334	¢40	4.0
Hard	175＜∽≤334	¢50	4.5
Hard	334＜∽	¢80	6.0

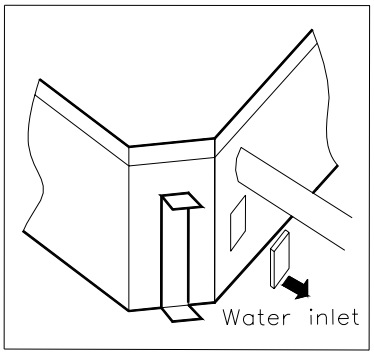
4.5 Drainage test

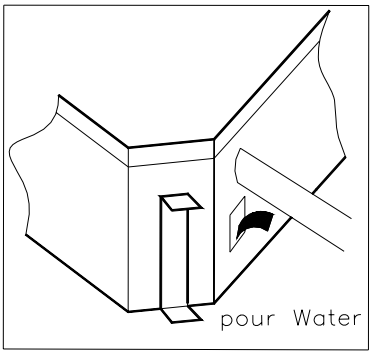
4.5.1 Drainage without drain pump

After finishing drainpipe installation, pour some water into the water receiver plate to check if the water flows smoothly.

4.5.2 Drainage with drain pump

4.5.2.1 Poke the Water Level Switch , remove the cover, use water pipe to pour 2000ml water into the water receipt plate through the water inlet.





4.5.2.2 Turn on the power to Cooling operation. Check the pump's operation and switch on the Water Level Switch. Check the pump's sound and look into the transparent hard pipe in the outlet at the same time to check if the water can discharge normally.

4.5.2.3 Stop the air conditioner running, turn off the power, and put back the cover.

- Stop the air conditioner. After 3 minutes, check if it has abnormity. If the collocation of drainpipes is illogical, the water will flow back overfull, which will cause the alarm lamp flashes, even overflow from the water receipt plate.
- Keep on pouring water until it gives an alarm signal for high water level, check if the pump drains water at once. If the water level can't fall below the alarmed water level after 3 minutes, the air conditioner will stop.

Turn off the power and drain the remained water, then turn on the air conditioner.

Note: The drain stuff in the main water receipt plate is for maintenance. Stuff up the drain stuff to prevent water leakage.

5. Insulation work

5.1 Insulation material and thickness

5.1.1. Insulation material

Insulation material should adopt the material which is able to endure the pipe's temperature: no less than 70℃ in the high-pressure side, no less than 120℃ in the low-pressure side(For the cooling type machine, no requirements at the low-pressure side.)

◆ Example: Heat pump type----Heat-resistant Polyethylene foam (withstand above 120℃)

Cooling only type---- Polyethylene foam (withstand above 100℃)

5.1.2. Thickness choice for insulation material

Insulation material thickness is as follows:

	Pipe diameter (mm)	Adiabatic material thickness
Refrigerant pipe	Φ6.4—Φ25.4	10mm
	Φ28.6—Φ38.1	15mm
Drainage pipe	Inner diameterΦ20—Φ32	6mm

5.2 Refrigerant pipe insulation

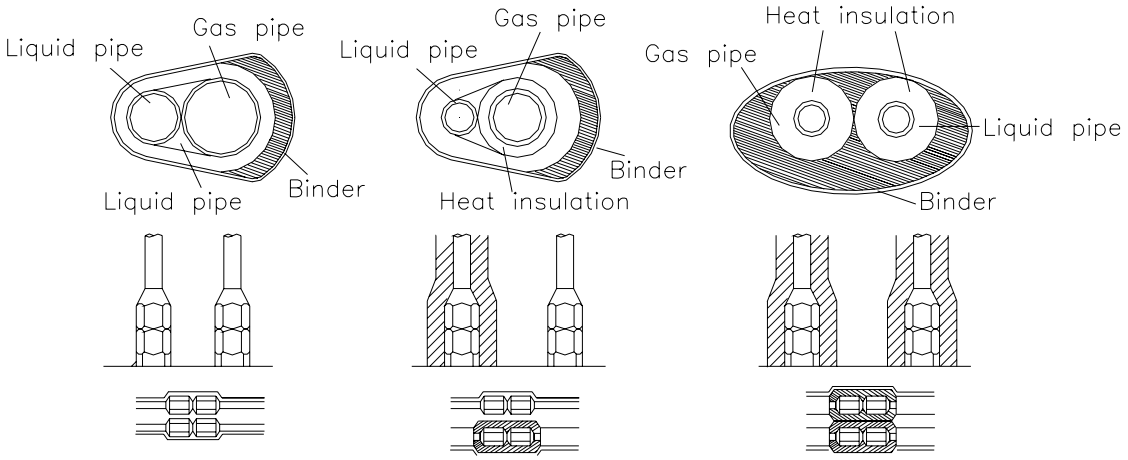
5.2.1. Work Procedure

① Before laying the pipes, the non-jointing parts and non-connection parts should be heat insulated.

② When the gas proof test is eligible, the jointing area, expanding area and the flange area should be heat insulated

5.2.2. Insulation for non-jointing parts and non-connection parts

wrong	right	
Gas pipe and liquid pipe should	Insulate the gas pipe (cooling only)	Insulate the gas pipe and liquid pipe

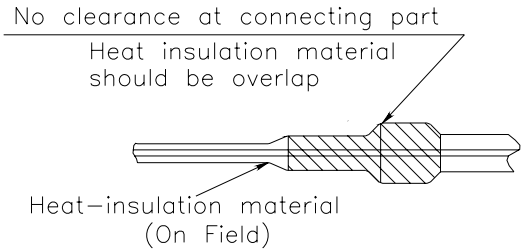


For construction convenience, before laying pipes, use insulation material to insulate the pipes to be deal with, at the same time, at two ends of the pipe, remain some length not to be insulated, in order to be welded and check the leakage after laying the pipes.

5.2.3. Insulate for the jointing area, expanding area and the flange area

① Insulate for the jointing area, expanding area and the flange area should be done after checking leakage of the pipes

② Make sure there's no clearance in the joining part of the accessorial insulation material and local preparative insulation material.



5.3 Drainage pipe insulation

The connection part should be insulated, or else water will be condensing at the non-insulation part.

5.4 Note

5.4.1 The jointing area, expanding area and the flange area should be heat insulated after passing the pressure test

5.4.2 The gas and liquid pipe should be heat insulated individually, the connecting part should be heat insulated individually.

5.4.3 Use the attached heat-insulation material to insulate the pipe connections (pipes' tie-in ,expand nut) of the indoor unit

PARTS GUIDE

CONDENSING UNITS

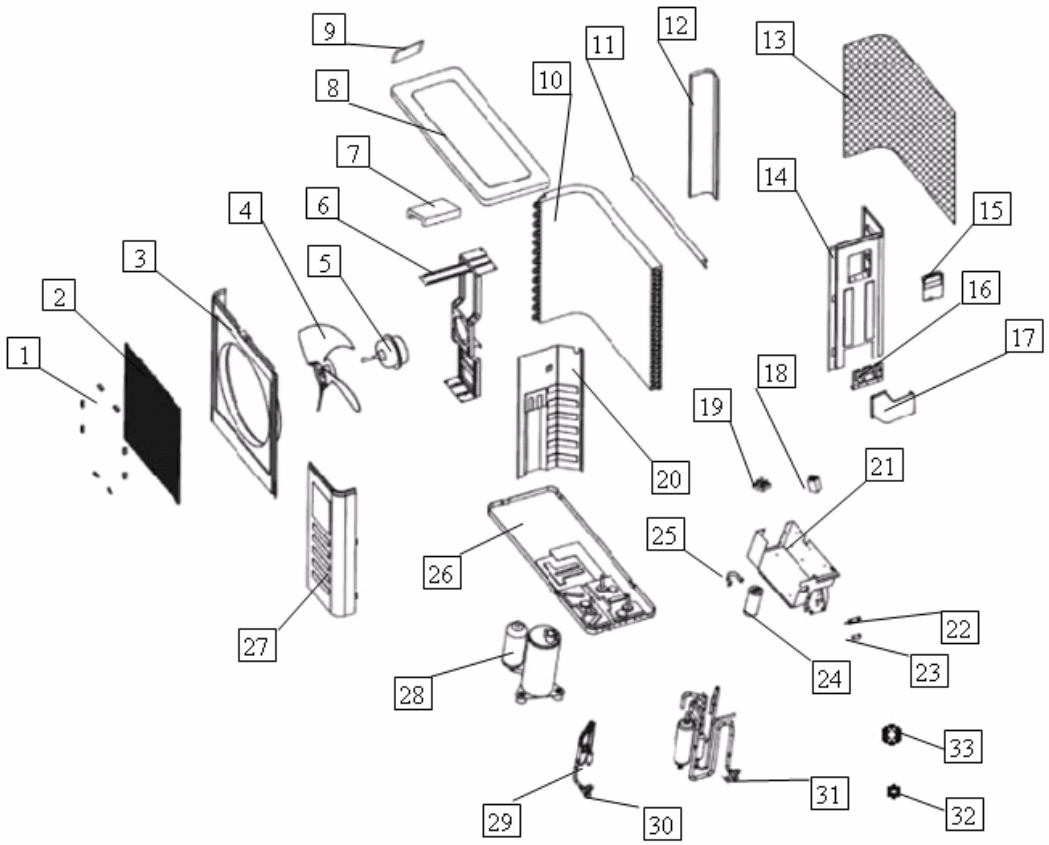
ASE-18A, ASE-24A
ASE-36A, ASE-48A, ASE-60A

sinclair
AIR CONDITIONING

8. Exploded view

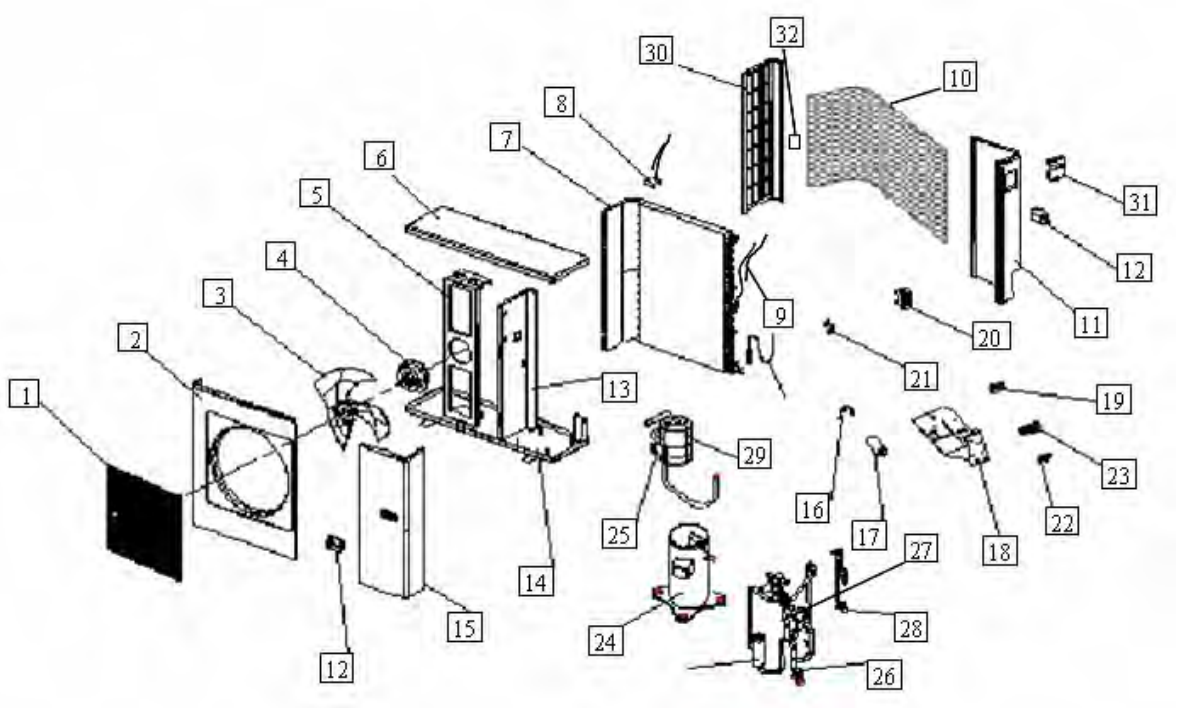
Exploded view

ASF-18A



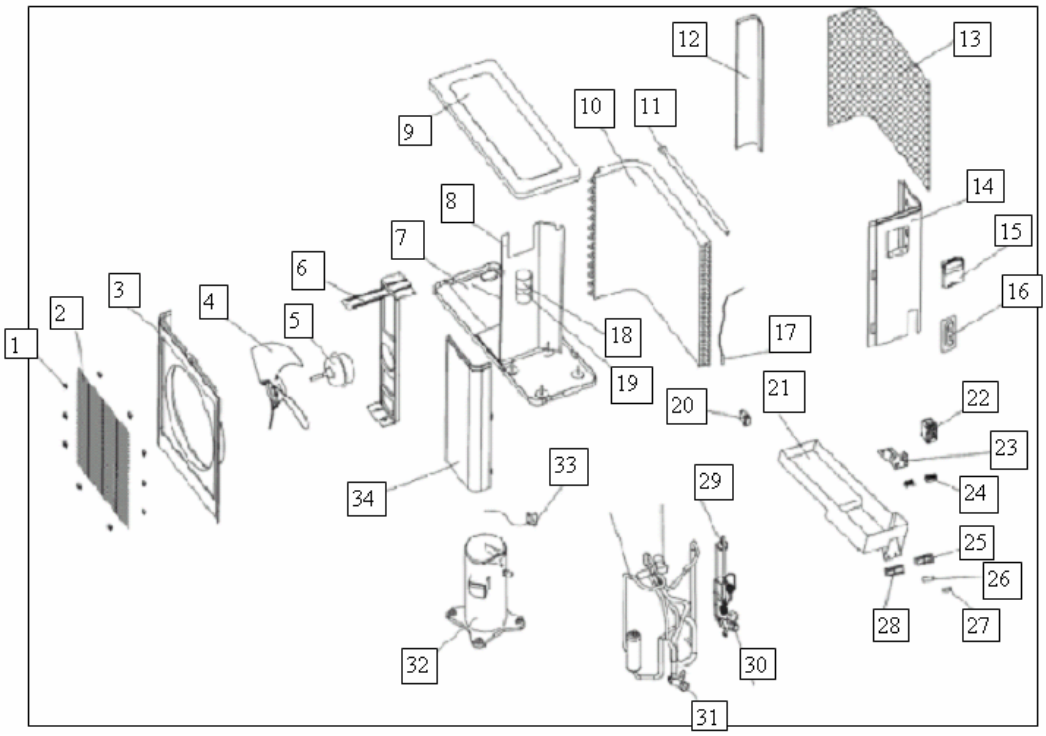
No.	Part Name	Quantity	No.	Part Name	Quantity
1	Clamp for front net	8	18	Fan motor capacitor	1
2	Front net	1	19	Wire joint	1
3	Front clapboard	1	20	Separating board	1
4	Propeller fan	1	21	Installation board for E-parts	1
5	Fan motor	1	22	Washer for wire joint	1
6	Holder for fan motor	1	23	Clamp for wiring	1
7	Foam over holder for motor	1	24	Compressor capacitor	1
8	Cover	1	25	Capacitor clamp	1
9	Little handle	1	26	Chassis	1
10	Condenser	1	27	Front right clapboard	1
11	Support board for motor holder	1	28	Compressor	1
12	Left clapboard	1	29	Liquid valve assy	1
13	Rear net	1	30	Liquid pipe valve	1
14	Rear right clapboard	1	31	Gas pipe valve	1
15	Big handle	1	32	Copper nut, TLM-A01	1
16	Installation plate for valves	1	33	Copper nut, TLM-C03	1
17	Water collector	1			

ASF-24A



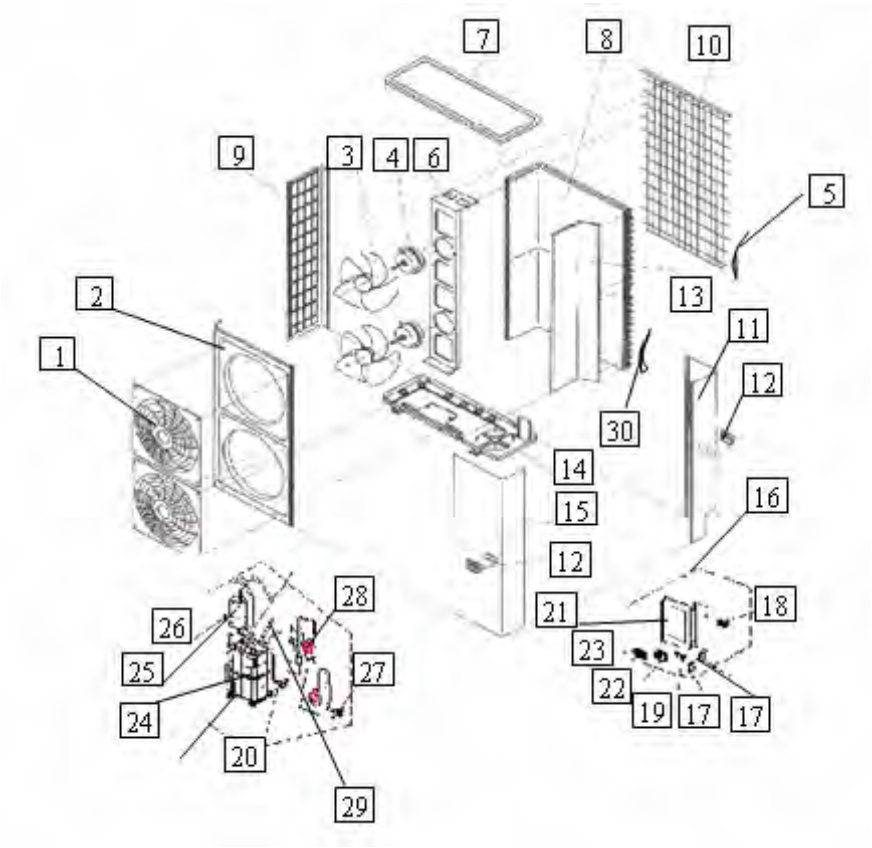
No.	Part Name	Quantity	No.	Part Name	Quantity
1	Front net	1	18	Washer for wire joint	1
2	Cabinet,Front	1		Terminal install board	1
3	Fan,Propeller	1	19	Terminal Block,2p	1
4	Fan Motor	1	20	AC contactor	1
5	Mount,Fan Motor	1	21	Capacitor,Fan Motor	1
6	Topcap Ass'y	1	22	Wire Clamp	1
7	Condenser Ass'y	1	23	Terminal Block,5p	1
8	Inlet Pipe for Condenser	1	24	Compressor	1
9	Outlet Pipe for Condenser	1	25	Fixture,Segregator	1
10	Rear Net	1	26	Liquid pipe valve	1
11	Support board,Back side	1	27	Capillary pipe	1
12	Handle	2	28	Gas pipe valve	1
13	Separating board	1	29	refrigerant Container	1
14	Base Pan Ass'y	1	30	Support board, Left Side	1
15	Cabinet,Front-Right	1	31	Big handle	1
16	Capacitor Clamp	1	32	Small Handle	1
17	Capacitor, Compressor	1	33	Copper nut, TLM-B02	1
18	Wiring Installation Panel	1	34	Copper nut, TLM-D04	1

ASF-36A



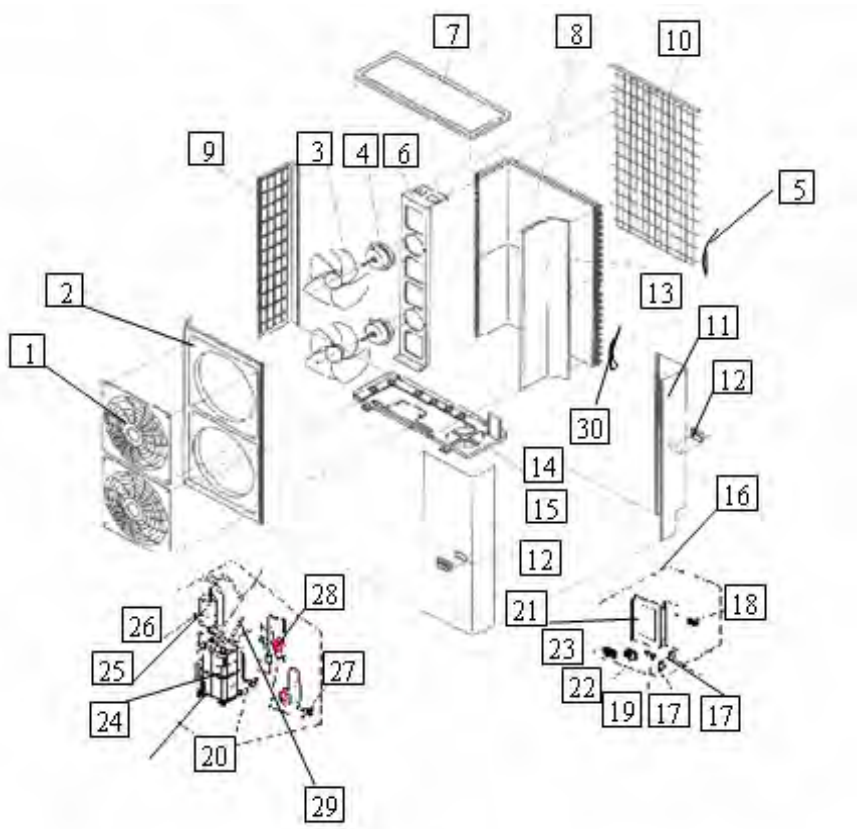
No.	Part Name	Quantity	No.	Part Name	Quantity
1	Clamp for front net	10	19	Container clamp	1
2	Front net	2	20	Fan motor capacitor	1
3	Front clapboard	1	21	Installation board for E-parts	1
4	Propeller fan	1	22	AC contactor	1
5	Fan motor	1	23	Main control board,Outdoor unit	1
6	Holder for fan motor	1	24	Wire joint for multiplexer	2
7	Chassis	1	25	Wire joint for multiplexer	1
8	Separating board	1	26	Washer for wire joint	1
9	Cover	1	27	Wire clamp	1
10	Condenser I	1	28	Wire joint for power	1
	Condenser II	1	29	Liquid valve assy	1
11	Support board for motor holder	1	30	Liquid valve	1
12	Left supporting bar	1	31	Gas valve	1
13	Rear net	1	32	Compressor	1
14	Rear right clapboard	1	33	Discharge temp sensor	1
15	Big handle	1	34	Front right clapboard	1
16	Installation plate for valves	1	35	Copper nut, TLM-C03	1
17	Pipe temp sensor	1	36	Copper nut, TLM-E05	1
18	Refrigerant container	1			

ASF-48A



No.	Part Name	Quantity	No.	Part Name	Quantity
1	Front net	2	15	Cabinet,Front Side	1
2	Cabinet,Front	1	16	E-control box, assy	1
3	Fan,Propeller	2	17	Capacitor,Fan Motor	2
4	Fan Motor	2	18	Terminal Block,2p	3
5	Room temp. sensor,outdoor	1	19	AC contactor	1
6	Mount,Fan Motor	1	20	Low Pressure Valve	1
7	Topcap Ass'y	1	21	PCB board,outdoor unit	1
8	Condensator I	1	22	Terminal Block,3p	1
	Condensator II	1	23	Wire joint for power	1
9	Left Side Cabinet	1	24	Compressor	1
10	Supporter, Rear Cabinet	1	25	Refrigerator Container	1
10	Supporter, Rear Cabinet	1	26	Fixture,Segregator	1
11	Cabinet,Back side	1	27	Low Pressure Valve	1
12	Handle	2	28	Capillary Tube Ass'y	1
13	Plate,Sound-proof	1	29	Discharge temp controller	1
14	Base Pan Ass'y	1	30	Pipe temp. sensor	1

ASF-60A



No.	Part Name	Quantity	No.	Part Name	Quantity
1	Front net	2	15	Cabinet, Front Side	1
2	Cabinet, Front	1	16	E-control box, assy	1
3	Fan, Propeller	2	17	Capacitor, Fan Motor	2
4	Fan Motor	2	18	Terminal Block,2p	3
5	Room temp. sensor, outdoor	1	19	AC contactor	1
6	Mount, Fan Motor	1	20	Low Pressure Valve	1
7	Topcap Ass'y	1	21	PCB board, outdoor unit	1
8	Condensator I	1	22	Terminal Block,3p	1
	Condensator II	1	23	Wire joint for power	1
9	Left Side Cabinet	1	24	Compressor	1
10	Supporter, Rear Cabinet	1	25	Refrigerator Container	1
10	Supporter, Rear Cabinet	1	26	Fixture, Segregator	1
11	Cabinet, Back side	1	27	Low Pressure Valve	1
12	Handle	2	28	Capillary Tube Ass'y	1
13	Plate, Sound-proof	1	29	Discharge temp controller	1
14	Base Pan Ass'y	1	30	Pipe temp. sensor	1